CLAIMS

1. A crystallized bottleneck of polyester beer bottle, wherein the crystallized bottleneck is no machined a screw thread and a crystallized length of the bottleneck portion is in a range of 0.5-35mm.

2. A crystallized bottleneck of polyester beer bottle according to claim 1, wherein said crystallized length of the bottleneck portion is in a range of 0.5-10mm.

3. A crystallized bottleneck of polyester beer bottle according to claim 1 or 2, wherein said bottleneck is made with a polyethylene terephthalate material.

4. A crystallized bottleneck of polyester beer bottle according to claim 1 or 2, wherein a flanged ring is provided to said crystallized bottleneck of polyester beer bottle, and said flanged ring has a plane bottom surface at a proper position spacing from the top flange of the bottleneck; the upper surface of the flanged ring is an acclivitous plane; the acclivitous plane forms an angle of 45° on vertical direction and converges to the outer surface of the bottleneck portion.

5. A method for manufacturing a crystallized bottleneck of polyester beer bottle according to claim 1, comprising the steps as follows:

a blank of a bottle made of polyester material is formed through drying, ejecting the polyester material and shaping it through cooling, then the uncrystallized blank of the bottle is placed for 24-72 hours in air-condition environment;

a crystallizer is preheated two hours or more before crystallizing to the blank of the bottle is started;

a bunker is loaded with the uncrystallized blank, which is delivered to an blank horse's head via a conveyor belt, then a bottleneck portion of uncrystallized bottle blank is sent into a crystallizer to heat it at high temperature and crystallize it via a arbor transmission chain; at the same time, the uncrystallized portion of the blank body is controlled, so that it is not effected by the environment at high temperature;

the polyester bottle blank having a crystallized bottleneck portion is

discharged through output blank horse's head and delivered to another conveyor belt to cool and shape it.

6. A method according to claim 5, wherein before a bunker is loaded with the uncrystallized blank, the temperature of bottle blank is controlled by an arbor temperature controller; after the uncrystallized bottleneck portion of the bottle blank is fed into the crystallizer, the temperature of the bottle blank is controlled by a bottleneck temperature controller.

7. A method according to claim 6, wherein when a bunker is loaded with the uncrystallized blank, the temperature of bottle blank is controlled in a range of 120-150℃.

8. A method according to claim 6, wherein after the uncrystallized bottleneck portion of the bottle blank is fed into the crystallizer, the temperature of the bottle blank is controlled in a range of 130-170℃ by a bottleneck temperature controller.

9. A method according to any of claims 5-8, wherein the crystallization time required for each bottle blank is controlled in a range of 90-120sec.

10. A method according to claim 5, wherein during the bottle blank is crystallized in the crystallizer, the body portion of bottle blank is free for the influence from an environment at high temperature using a cooling partition.